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2007 JEEP Cherokee/Liberty OEM Service and Repair Workshop Manual

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CONDITION	POSSIBLE CAUSES	CORRECTION
	3. Wire harness not connected to overhead console sunroof control switches	3. Lower overhead console to confirm MODULE-OVER HEAD CONSOLE harness connector is connected to overhead console.
	4. Blown ignition feed fuse.	4. Inspect ignition feed Fuse F13 located in Power Distribution Center-Interior and replace if required. Refer to Wiring Diagrams for correct fuse identification (BODY/ SUNROOF/POWER TOP SYSTEM - DUAL PANE).
	5. Broken B(+) A130 or Ground Circuit Z911. Bent connector pins, wire damage or connectors not fully seated.	5. Disconnect connector XY490A (headliner to sunroof connector) and inspect for bent pins. With vehicle battery connected check for battery voltage between pins 1 & 4 on XY490A headliner connector (ignition state is irrelevant). If no voltage detected disconnect wire harness connections between Power Distribution Center-Interior and Sunroof Assy for B(+) circuit A130 and Ground circuit Z915. Inspect each connector closely for bent connector pin. Refer to Wiring Diagrams for connector pin outs (BODY/ SUNROOF/POWER TOP SYSTEM - DUAL PANE/Diagram). Replace wire harness or repair if bent connector pin found.
	6. Broken fused ignition (RUN/ON) circuit F781.	6. Disconnect connector XY490A (headliner to sunroof connector) and measure the voltage between GROUND pin 4 and FUSED IGNITION pin 14 in the XY490A connector with vehicle battery connected and ignition set to ON/Run. Refer to Wiring Diagrams for connector pin out (BODY/ SUNROOF/POWER TOP SYSTEM - DUAL PANE/ Connectors).
	7. Defective sunroof/sunshade switch	7. Test and replace the sunroof/sunshade switch assy (overhead console assembly) if required.

CONDITION	POSSIBLE CAUSES	CORRECTION
		circuit found. Proceed to Step 5 if circuit tests OK.
	3. Bent connector pin for CLOSE switch circuit Q5 or Q56 at one of the wire harness connections between the sunroof and overhead console sunroof/sunshade control switch	3. Disconnect wire harness connections at: - MODULE-OVER HEAD CONSOLE (D6627A) - XY490A - MOTOR-SUNROOF SHADE (D3218A) - MOTOR-SUNROOF (D3853A) Inspect each connector closely for bent connector pin. Replace wire harness or repair if bent connector pin found. If no bent connector pins found proceed to Step 4.
	4. Broken or damaged wire between sunroof or sunshade CLOSE switch in overhead console and sunroof motors (circuits Q5 or Q56).	4. Inspect wire harnesses for SUNROOF CLOSE SIGNAL Q5 or SUNROOF SHADE SIGNAL Q56 circuit continuity between: - MODULE-OVER HEAD CONSOLE (D6627A) and XY490A Refer to Wiring Diagrams for connector pin outs (BODY/ SUNROOF/POWER TOP SYSTEM - DUAL PANE/ Connectors). Repair or replace wire harness with broken circuit.
	5. Defective sunroof/sunshade motor assy.	5. Replace the sunroof/sunshade motor if required.
POWER SUNROOF SLIDES OPEN AND CLOSE BUT WILL NOT VENT	1. Defective sunroof VENT switch in overhead console.	1. Lower overhead console and disconnect MODULE-OVER HEAD CONSOLE (D6627A) wire connection and test switch to confirm circuit closes between SUNROOF VENT SIGNAL Q4 and SUNROOF SWITCH RETURN Q6 while VENT switch is pressed. Refer to Wiring Diagrams for connector pin out (BODY/ SUNROOF/POWER TOP SYSTEM - DUAL PANE/ Connectors/ MODULE-OVER HEAD CONSOLE). Replace switch if necessary. Proceed to Step 2 if switch tests OK.
	2. Broken SUNROOF VENT Q4 circuit.	2. Disconnect wire harness connections: - XY490A at sunroof harness - MODULE-OVER HEAD CONSOLE (D6627A) at overhead console Test the

CONDITION	POSSIBLE CAUSES	CORRECTION
		circuit Z915. Inspect each connector closely for bent connector pin. Refer to Wiring Diagrams for connector pin outs (BODY/ SUNROOF/POWER TOP SYSTEM - SINGLE PANE/Diagram). Replace wire harness or repair if bent connector pin found.
	6. Broken fused ignition (RUN/ON) circuit F987.	6. Disconnect connector XY490A (headliner to sunroof connector) and measure the voltage between GROUND pin 1 and FUSED IGNITION pin 2 in the XY490A connector with vehicle battery connected and ignition set to ON/Run. Refer to Wiring Diagrams for connector pin out (BODY/ SUNROOF/POWER TOP SYSTEM - SINGLE PANE/ Connectors). Inspect fused ignition circuit F987 for bent connector pins or broken wires and repair if no battery voltage detected.
	7. Defective sunroof switch assembly in overhead console.	7. Test and replace the sunroof switch assembly (overhead console assembly) if required.
	8. Broken SUNROOF SWITCH RETURN Q6 circuit.	8. Disconnect the MODULE-OVER HEAD CONSOLE (D6627A) connection at overhead console and confirm that connector pin for SUNROOF SWITCH RETURN Q6 grounds out to body (refer to BODY/ SUNROOF/POWER TOP SYSTEM - SINGLE PANE/ Connectors/ MODULE-OVER HEAD CONSOLE (D6627A) for pin out information). If SUNROOF SWITCH RETURN Q6 does not ground to body inspect circuit for damaged wire or bent pin and repair if necessary.
	8. Defective sunroof motor assembly.	8. Replace the sunroof motor if required.
SLIGHT SUNROOF MOVEMENT OR AUDIBLE RELAY CLICKS BUT WILL NOT COMPLETE MOVEMENT FOR ANY	1. Binding glass mechanism due to debris or obstruction	1. Remove the debris or obstruction from sunroof guide rail.

CONDITION	POSSIBLE CAUSES	CORRECTION
		Refer to Wiring Diagrams for connector pin out (BODY/ SUNROOF/POWER TOP SYSTEM - SINGLE PANE/ Connectors/ MODULE-OVER HEAD CONSOLE (D6627A)). Replace switch if necessary.
	2. Broken SUNROOF VENT Q4 circuit.	2. Disconnect wire harness connections: - XY490A at sunroof harness - MODULE-OVER HEAD CONSOLE (D6627A) at overhead console Test the continuity of the SUNROOF VENT SIGNAL Q4 circuit. Refer to Wiring Diagrams for connector pin outs (BODY/ SUNROOF/POWER TOP SYSTEM - SINGLE PANE/ Connectors). Proceed to Step 3 if broken circuit found. Proceed to Step 5 if circuit tests OK.
	3. Bent connector pin for VENT switch circuit Q4 at one of the wire harness connections between the sunroof and overhead console sunroof control switch	3. Disconnect wire harness connections at: - MODULE-OVER HEAD CONSOLE (D6627A) - XY490A - MOTOR-SUNROOF (D3036A) Inspect each connector closely for bent connector pin. Replace wire harness or repair if bent connector pin found. If no bent connector pins found proceed to Step 4.
	4. Broken or damaged wire between sunroof VENT switch in overhead console and sunroof motors (circuit Q4).	4. Inspect wire harnesses for SUNROOF VENT SIGNAL Q4 circuit continuity between: - MODULE-OVER HEAD CONSOLE (D6627A) and XY490A Refer to Wiring Diagrams for connector pin outs (BODY/ SUNROOF/POWER TOP SYSTEM - DUAL PANE/ Connectors). Repair or replace wire harness with broken circuit.
	5. Defective sunroof motor assembly.	5. Replace the sunroof motor if required.

1. Lower the headliner from the inner roof panel ([Refer to 23 - Body/Interior/HEADLINER/Removal and Installation](#)).
2. Disconnect the wire harness connector from the sunroof or sunshade motor.
3. Remove the sunroof or sunshade motor screws securing the motor to the sunroof frame.
4. Remove the motor from the vehicle.

INSTALLATION

Follow the removal procedure in reverse for general reassembly of the components on the vehicle. The steps listed below are calling out specific procedures that should be followed during installation.

- Perform the sunroof initialization and obstacle detection calibration ([Refer to Electrical/Power Top, Convertible/Standard Procedure](#)).

TORQUE SPECIFICATIONS - SUNROOF

DESCRIPTION	SPECIFICATION	COMMENT
Dual Pane Sunroof Motor Mounting Screws	3 N·m (27 In. Lbs.)	–
Single Pane Sunroof Motor Mounting Screws	3 N·m (27 In. Lbs.)	–
Sunshade Motor Mounting Screws	3 N·m (27 In. Lbs.)	–

operations are fully completed; the power sunshade will cycle to the full open position, sunroof glass will cycle to full open position and back to closed position, power sunshade will cycle to closed position.

4. Release the switch once all operation stops; initialization and calibration of motors is complete. If the switch is released prior to full completion of the operations described the entire initialization and obstacle detection calibration must be repeated.

Procedure 2: Re-initialization & Obstacle Detection Calibration

Procedure 2 must be performed when one of the following scenarios are true:

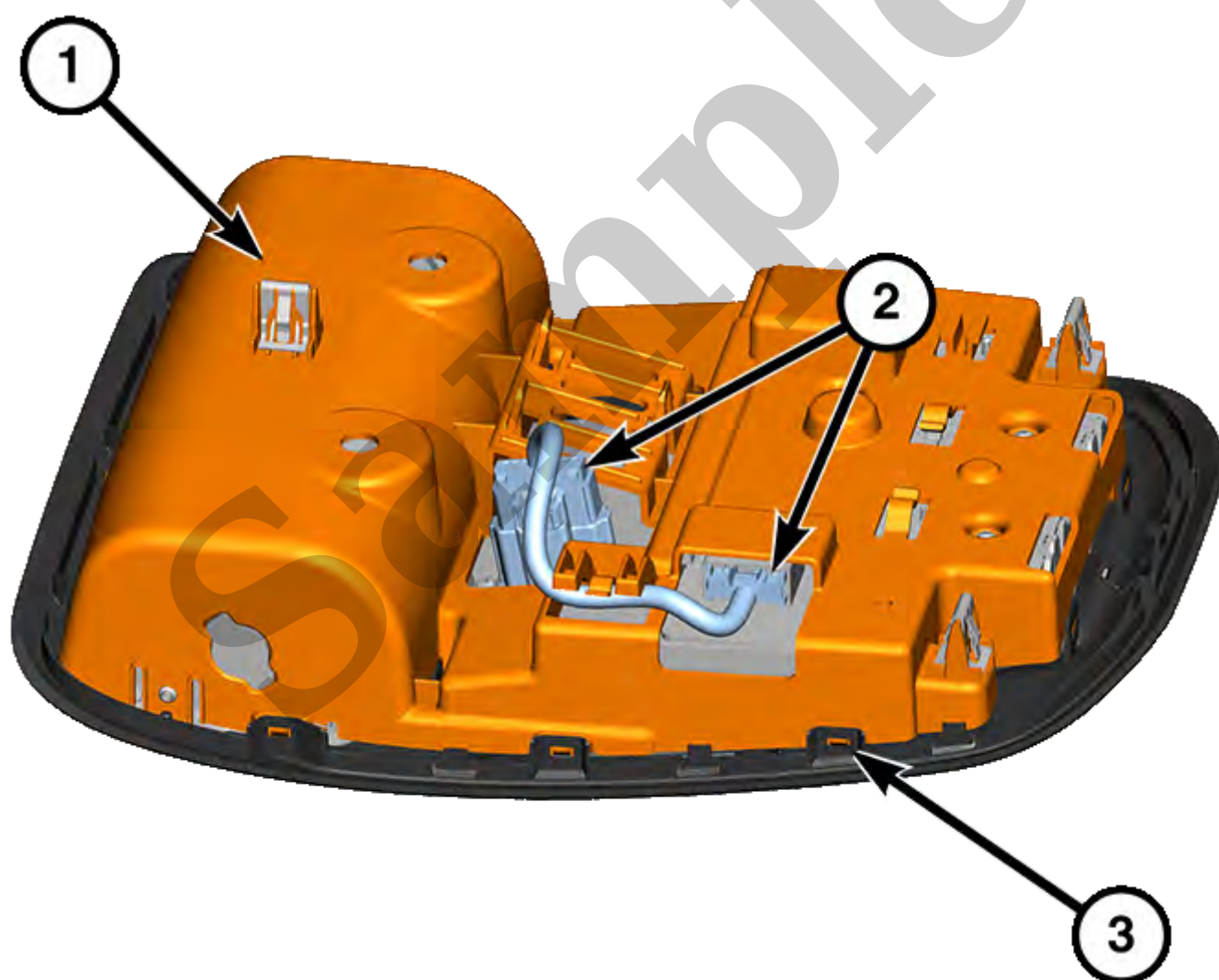
- Original existing motors have been removed and reinstalled on the sunroof module.
 - Sunshade Assembly, Glass Assembly, Wind Deflector or Seals have been replaced.
 - Sunroof glass or sunshade closed position setting incorrect.
 - Sunroof Assembly, Glass Assemblies, Wind Deflector or Seals have been removed and reinstalled in vehicle.
 - Express operation "one touch" is not functioning.
 - Sunroof glass or power sunshade is auto-reversing during express close operation with no obstruction blocking sunroof.
1. Set vehicle ignition to ON/Run.
 2. Ensure sunroof is in closed position.
 3. Open front driver side door.
 4. Switch vehicle ignition to OFF.
 5. Within 5 seconds set vehicle ignition back to ACCESSORY (ACC) or ON/Run.
 6. Within 10 seconds push and hold the sunroof glass CLOSE switch. After 10 seconds of holding the switch the re-calibration process will be begin. Continue to hold the switch through the following events: the glass will cycle slightly forward into a hard stop then stop (an audible click noise from motor will be heard), the power sunshade will then cycle to CLOSE position and stop (an audible click noise from motor will be heard when full close position achieved).
 7. Once the sunroof glass and power sunshade have stopped motion release the sunroof glass CLOSE switch then push and hold it again within 5 seconds. Continue to hold the switch through the following sequence of events, do not release the switch until all operations are fully completed; the power sunshade will cycle to the full open position, sunroof glass will cycle to open position and back to closed position, power sunshade will cycle to closed position.
 8. Release the CLOSE switch once all operation stops; re-calibration of motors is complete. If the switch is released prior to full completion of the operations described the entire re-calibration procedure must be repeated from Step 1.

YOUR CURRENT VEHICLE

Sunroof Switch

SUNROOF SWITCH

REMOVAL

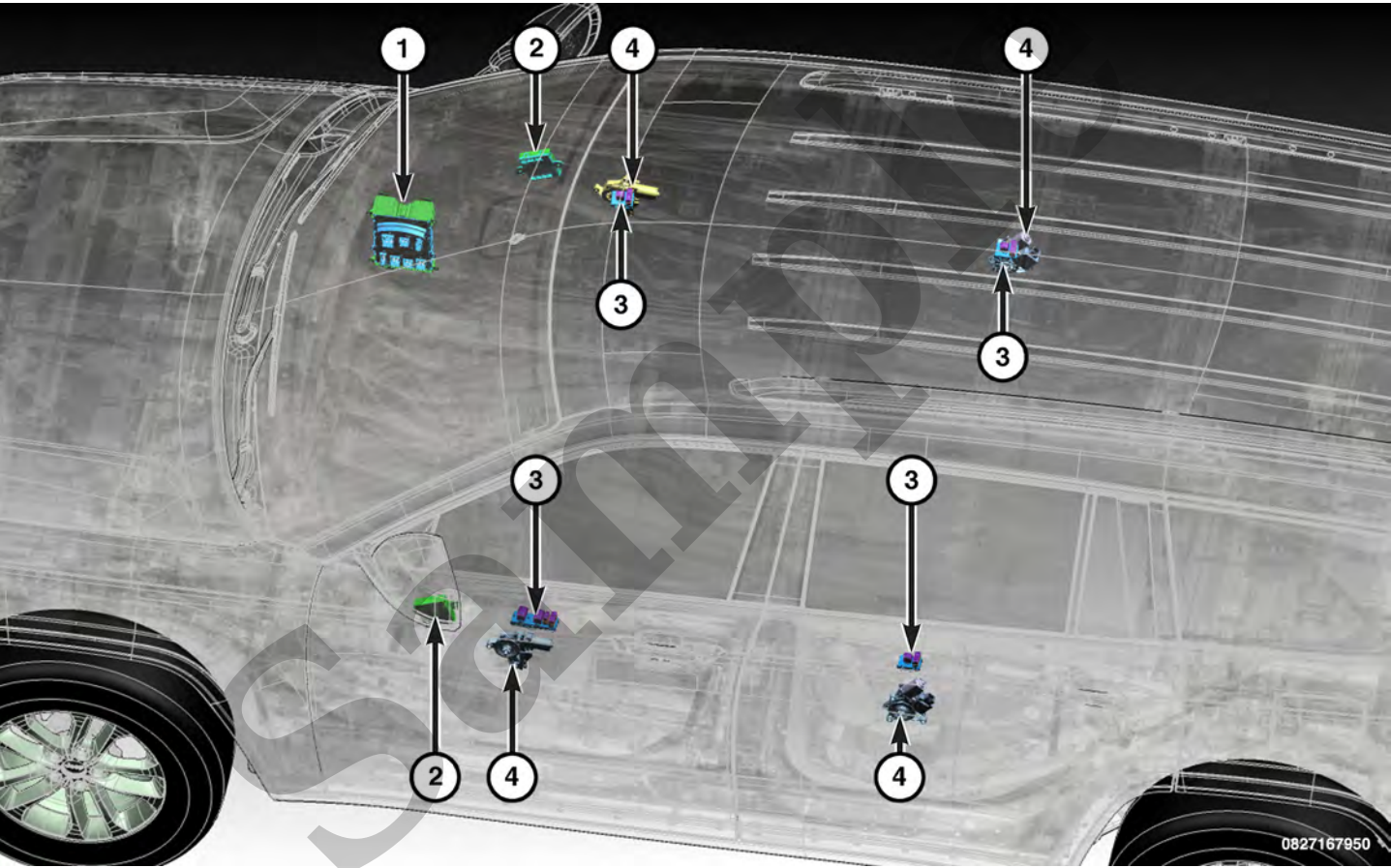


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YOUR CURRENT VEHICLE

Power Window System

POWER WINDOW SYSTEM



DESCRIPTION

The following are some of the components that comprise the power window system:

Component Index

1.	Body Control Module (BCM)
2.	Driver Door Module and Passenger Door Module (DDM/PDM)
3.	Door Switch Module

motors are able to recognize their respective window position and send an appropriate status signal to the BCM.

The power window motors on this vehicle contain over current protection managed by the DDM/PDMs. The DDM/PDMs receive CAN-IHS ambient temperature values and an ignition off time signal from the BCM. The DDM/PDMs use these inputs to provide over current protection.

To initialize the window motors:

1. Move the window to the full closed position using manual mode.
2. The switch must continue to be held for a minimum of one second after the window reaches the full close position.